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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/749,874

12/31/2003

Rene Purnadi

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EXAMINER

BHANDARI, PUNEET

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,874

Applicant(s)

PURNADI ET AL.

Examiner

Puneet Bhandari

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 18-22, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 4-17, 23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/02/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims **18 & 20** are objected to because of the following informalities:

Regarding claim **18**, it appears that a word is missing between words "layer" and "a". Applicant is requested to clarify this limitation.

Regarding claim **20**, an objection is made to the use of the phrase "adapted to" on line 2. The use of this phrase is optional language (see MPEP-2106.II.C).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **1-3, 18-22 & 25-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludwig et al. (US 6,816,471) in view of Yin et al. (US 6,490,251).

Regarding claims **1 & 21**, Fig 4 of Ludwig et al. teaches "a radio access network (401) coupled to a core network (400) monitoring wireless transmission of packet according to a layer protocol the radio access network including equipment implementing a radio layer (L1)"; and Fig. 6 of Ludwig et al. teaches "the upper layer (L3) distinguished at least in that the radio layer (L2) receives data as packets from the upper layer (L3) and prepares the data for transmission over air by forming radio frames

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corresponding to the packets(S3)" also disclosed in column 5, line 55-column 6 line 5, the method characterized by:

A step of local acknowledgement in which the radio layer sends a local acknowledgement to the upper layer on occurrence of a predetermined event is disclosed in column 8, lines 8-32. The reference discloses link reset corresponds to predetermined event and providing information to L3 layer corresponds to claimed step of sending local acknowledgement.

Ludwig et al. fails to disclose a step of slow release in which a upper layer removes from the buffer maintained by the upper layer the oldest packet in the buffer when the buffer is full and a new packet arrives, and does so independently of whether the oldest packet has been acknowledged by the radio layer of the terminal.

Yin et al. discloses an upper layer removing from the buffer maintained by the upper layer the oldest packet in the buffer when the buffer is full and in IP the oldest packet gets dropped first independently of whether the oldest packet has been acknowledged or not (see column 8, lines 14-20 of Yin et al.)

At the time invention was made it would have been obvious to combine Yin et al method of removing the oldest packet in the buffer to the method of Ludwig et al. One in ordinary skill in art would have been motivated to do this to provide a congestion control mechanism in network (see column 8, lines 15-20 of Yin et al).

Regarding claims **2 & 22** Ludwig et al. further teaches in the step of local acknowledgement, the radio layer includes with the local acknowledgement a sequence

number disclosed in column 7, line 54- column 8, line 7. *Sequence number of column 8, line 7 corresponds to the claimed sequence number.*

Regarding claim **3**, Ludwig et al. further teaches process of removing the packet from the buffer having a sequence number equal to the sequence number included with the local acknowledgement disclosed in column 7, lines 55-65 .The reference discloses data packets corresponding to a sequence number acknowledged are removed from the buffer.

Regarding claims **18 & 25**, Ludwig et al. further teaches the method in which local acknowledgement signals the upper layer to release the buffer to the target is disclosed in column 9, lines 5-19 .The reference discloses transferring of unacknowledged L3 data packets.

Regarding claim **19**, Ludwig et al. further teaches in Fig (2) a computer readable storage structure (buffer-3) embodying computer program code thereon for execution by one or more computer processors in radio access network, and in Fig (1) computer program code instructions for performing the steps of the method.

Regarding claim **20**, Fig 3 of Ludwig et al. further teaches a radio access network comprising equipment adapted to perform the said method.

Regarding claim **26**, Fig 4 of Ludwig et al. further teaches a wireless communication system, comprising a core network (400), a terminal (500), and a radio access network (401) and communicatively coupling the terminal (500) to the core network (400)

Allowable Subject Matter

4. Claims are **4-17 & 23-24** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are Hwang (US 6,804,202), Ahmadvand et al. (US 6,542,490), Sen et al. (6,556,556) Miklos (US 6,621,796) and Larsson et al. (US 6,424,625).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Puneet Bhandari whose telephone number is 571-272-2057. The examiner can normally be reached on 9.00 AM To 5.30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lb

Puneet Bhandari
Examiner Art Unit 2666

Seema S. Rao
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